

WEST Search History

DATE: Friday, April 26, 2002

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT; PLUR=YES; OP=AND</i>			
L2	6235496	1	L2
L1	6103492	1	L1

no double patenting

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L1: Entry 1 of 1

File: USPT

Aug 15, 2000

US-PAT-NO: 6103492

DOCUMENT-IDENTIFIER: US 6103492 A

TITLE: Polynucleotide encoding mu opioid receptor

DATE-ISSUED: August 15, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yu; Lei	Indianapolis	IN		

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1, 435/325, 435/471, 435/70.1, 435/71.1, 435/71.2, 536/23.5

CLAIMS:

What is claimed is:

1. An isolated nucleic acid molecule that comprises a segment of at least 35 contiguous nucleotides of SEQ ID NO:7, wherein said segment comprises at least the guanine nucleotide at position 151 of SEQ ID NO:7.
2. The nucleic acid molecule of claim 1, comprising a segment of at least 40 contiguous nucleotides of SEQ ID NO:7, wherein said segment comprises at least the guanine nucleotide at position 151 of SEQ ID NO:7.
3. The nucleic acid molecule of claim 2, comprising a segment of at least 45 contiguous nucleotides of SEQ ID NO:7, wherein said segment comprises at least the guanine nucleotide at position 151 of SEQ ID NO:7.
4. The nucleic acid molecule of claim 3, comprising a segment of at least 50 contiguous nucleotides of SEQ ID NO:7, wherein said segment comprises at least the guanine nucleotide at position 151 of SEQ ID NO:7.
5. The nucleic acid molecule of claim 4, comprising a segment of at least 55 contiguous nucleotides of SEQ ID NO:7, wherein said segment comprises at least the guanine nucleotide at position 151 of SEQ ID NO:7.
6. An isolated nucleic acid molecule that encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:8.
7. The nucleic acid molecule of claim 6, wherein said nucleic acid molecule is DNA.
8. The nucleic acid molecule of claim 6, wherein said nucleic acid molecule is operably linked to a promoter.
9. The nucleic acid molecule of claim 8, wherein said nucleic acid molecule is operably linked to a prokaryotic promoter.
10. The nucleic acid molecule of claim 8, wherein said nucleic acid molecule is operably linked to an eukaryotic promoter.
11. The nucleic acid molecule of claim 6, comprising a nucleotide sequence of at least 35 contiguous nucleotides of SEQ ID NO:7 that includes at least the guanine nucleotide

- corresponding to guanine nucleotide 151 of SEQ ID NO: 7.
- 12. The nucleic acid molecule of claim 11, comprising a nucleotide sequence of at least 40 contiguous nucleotides of SEQ ID NO:7 that includes at least the guanine nucleotide corresponding to guanine nucleotide 151 of SEQ ID NO:7.
- 13. The nucleic acid molecule of claim 12, comprising a nucleotide sequence of at least 45 contiguous nucleotides of SEQ ID NO:7 that includes at least the guanine nucleotide corresponding to guanine nucleotide 151 of SEQ ID NO:7.
- 14. The nucleic acid molecule of claim 13, comprising a nucleotide sequence of at least 50 contiguous nucleotides of SEQ ID NO:7 that includes at least the guanine nucleotide corresponding to guanine nucleotide 151 of SEQ ID NO:7.
- 15. The nucleic acid molecule of claim 14, comprising a nucleotide sequence of at least 75 contiguous nucleotides of SEQ ID NO:7 that includes at least the guanine nucleotide corresponding to guanine nucleotide 151 of SEQ ID NO:7.
- 16. The nucleic acid molecule of claim 15, comprising a nucleotide sequence of at least 100 contiguous nucleotides of SEQ ID NO:7 that includes at least the guanine nucleotide corresponding to guanine nucleotide 151 of SEQ ID NO:7.
- 17. The nucleic acid molecule of claim 16, comprising the nucleotide sequence of SEQ ID NO:7.
- 18. A vector comprising a nucleic acid molecule that encodes the amino acid sequence of SEQ ID NO:8.
- 19. A vector comprising a nucleic acid molecule that encodes a nucleotide sequence of at least 40 contiguous nucleotides of SEQ ID NO:7 that includes at least the guanine residue corresponding to guanine residue 151 of SEQ ID NO:7.
- 20. The vector of claim 18 or 19, wherein said nucleic acid molecule is operatively linked to a promoter.
- 21. The vector of claim 20, wherein said nucleic acid molecule is operatively linked to a prokaryotic promoter.
- 22. The vector of claim 20, wherein said nucleic acid molecule is operatively linked to an eukaryotic promoter.
- 23. A host cell transformed with a nucleic acid molecule that encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:8.
- 24. The host cell of claim 23, wherein said nucleic acid molecule comprises the nucleic acid sequence of SEQ ID NO:7.
- 25. The host cell of claim 23, wherein said host cell is an eukaryotic cell.
- 26. The host cell of claim 25, wherein said eukaryotic host cell is a COS cell.
- 27. The host cell of claim 23, wherein said host cell is a prokaryotic cell.
- 28. The host cell of claim 27, wherein said prokaryotic host cell is E. coli.
- 29. The host cell of claim 23, wherein said host cell is cultured under conditions that permit the expression of said nucleic acid molecule to produce the encoded polypeptide.
- 30. The host cell of claim 23, comprising the vector of claim 18 or claim 19.
- 31. A method of expressing a polypeptide in a host cell comprising:
 - (a) culturing a host cell that comprises a nucleic acid molecule that encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:8 under conditions sufficient for expression of the polypeptide; and
 - (b) expressing said polypeptide in said cell.
- 32. The method of claim 31, wherein said nucleic acid molecule comprises a segment

- identical to at least 35 contiguous nucleotides from SEQ ID NO:7.
33. The method of claim 32, wherein said nucleic acid molecule comprises a segment identical to at least 40 contiguous nucleotides from SEQ ID NO:7.
34. The method of claim 33, wherein said nucleic acid molecule comprises a segment identical to at least 45 contiguous nucleotides from SEQ ID NO:7.
35. The method of claim 34, wherein said nucleic acid molecule comprises a segment identical to at least 50 contiguous nucleotides from SEQ ID NO:7.
36. The method of claim 35, wherein said nucleic acid molecule comprises the sequence of SEQ ID NO:7.
37. A method of expressing a polypeptide in a host cell comprising:
- (a) culturing a host cell that comprises a nucleotide sequence comprising SEQ ID NO: 16 and encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:17 under conditions sufficient for expression of the polypeptide; and
 - (b) expressing said polypeptide in said cell.

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L2: Entry 1 of 1

File: USPT

May 22, 2001

US-PAT-NO: 6235496

DOCUMENT-IDENTIFIER: US 6235496 B1

TITLE: Nucleic acid encoding mammalian mu opioid receptor

DATE-ISSUED: May 22, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yu; Lei	Indianapolis	IN		

US-CL-CURRENT: 435/69.1; 435/252.33, 435/320.1, 435/325, 435/358, 435/365, 536/23.1

CLAIMS:

What is claimed is:

1. An isolated and purified polynucleotide that encodes a mammalian mu opioid receptor polypeptide, said polypeptide comprising an amino acid residue sequence of SEQ ID NO:2.
2. The isolated and purified polynucleotide of claim 1, wherein said polynucleotide is a DNA molecule.
3. The isolated and purified polynucleotide of claim 1, wherein said polynucleotide comprises the nucleotide base sequence of SEQ ID NO:1.
4. An isolated and purified polynucleotide comprising a base sequence that is identical or complementary to a segment of at least 35 contiguous bases of SEQ ID NO:1.
5. An expression vector comprising a polynucleotide that encodes a mammalian mu opioid receptor polypeptide, wherein said polynucleotide has a sequence having at least 35 contiguous bases identical to SEQ ID NO:1 or its complement and said polynucleotide is capable of hybridizing to SEQ ID NO:1 or its complement under a hybridization condition involving 0.02M-0.15M NaCl at a temperature of about 50.degree. C. to about 70.degree. C.
6. A recombinant host cell transfected with a polynucleotide that encodes a mammalian mu opioid receptor polypeptide, wherein said polynucleotide has a sequence having at least 35 contiguous bases identical to SEQ ID NO:1 or its complement and said polynucleotide is capable of hybridizing to SEQ ID NO:1 or its complement under a hybridization condition involving 0.02M-0.15M NaCl at a temperature of about 50.degree. C. to about 70.degree. C.
7. A process of preparing a mammalian mu opioid receptor polypeptide comprising
 - (a) transfecting a cell with a polynucleotide that encodes a mammalian mu opioid receptor polypeptide, wherein said polynucleotide has a sequence having at least 35 contiguous bases identical to SEQ ID NO:1 or its complement and said polynucleotide is capable of hybridizing to SEQ ID NO:1 or its complement under a hybridization condition involving 0.02M-0.15M NaCl at a temperature of about 50.degree. C. to about 70.degree. C.;
 - (b) maintaining the transformed host cell under biological conditions sufficient for expression of the polypeptide; and

(c) recovering the receptor.

8. The isolated and purified polynucleotide of claim 4, further defined as comprising the base sequence of SEQ ID NO:1.

9. The isolated and purified polynucleotide of claim 4, further defined as encoding a full length mammalian mu opioid receptor wherein said polynucleotide is capable of hybridizing to SEQ ID NO:1 or its complement under a hybridization condition involving 0.02M-0.15M NaCl at a temperature of about 50.degree. C. to about 70.degree. C.

10. The isolated and purified polynucleotide of claim 4, further defined as encoding a human mu opioid receptor wherein said polynucleotide is capable of hybridizing to SEQ ID NO:1 or its complement under a hybridization condition involving 0.02M-0.15M NaCl at a temperature of about 50.degree. C. to about 70.degree. C.

11. The isolated and purified polynucleotide of claim 4, further defined as comprising a base sequence that is identical or complementary to a segment of at least 55 contiguous bases of SEQ ID NO:1.

12. The expression vector of claim 5, wherein said polynucleotide has a sequence in which at least 55 contiguous bases identical to or complementary to at least 55 contiguous bases of SEQ ID NO:1.

13. The recombinant host cell of claim 6, wherein the polynucleotide that encodes a mammalian mu opioid receptor polypeptide has at least 55 contiguous bases that are identical to or complementary to 55 contiguous bases of SEQ ID NO:1.

14. The process of claim 7, wherein the polynucleotide that encodes a mammalian mu opioid receptor polypeptide has a sequence in which at least 55 contiguous bases are identical to or complementary to 55 contiguous bases of SEQ ID NO:1.

15. An expression vector comprising a polynucleotide comprising a base sequence that is identical or complementary to a segment of at least 35 contiguous bases of SEQ ID NO:1.